

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

REC'D 18 JUN 2004

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Applicant's or agent's file reference RHP/22626.WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/01011	International filing date (day/month/year) 12.03.2003	Priority date (day/month/year) 12.03.2002
International Patent Classification (IPC) or both national classification and IPC G01N33/02		
Applicant SINCLAIR INTERNATIONAL LIMITED et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.
 - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

- This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the International application
- VIII ☐ Certain observations on the International application

Date of submission of the demand 10.10.2003	Date of completion of this report 16.06.2004
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Joyce, D Telephone No. +31 70 340-3093



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International application No. **PCT/GB 03/01011**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

Description, Pages

1-6 as originally filed

Claims, Numbers

1-9 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-9
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	
	No: Claims	1-9

2. Citations and explanations

see separate sheet

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Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: WO 98 52037 A (BRIGGS PETER DAVID SINCLAIR ;SINCLAIR INT LTD (GB))
19 November 1998 (1998-11-19) cited in the application
- D2: US-A-5 691 473 (PELEG KALMAN) 25 November 1997 (1997-11-25)
- D3: WO 98 40737 A (CAWLEY PETER ;IMPERIAL COLLEGE (GB)) 17 September
1998 (1998-09-17) cited in the application
- D4: WO 97 27006 A (ESHET EILON ;CARMi YOASH (IL); RAZ OMRI (IL)) 31 July
1997 (1997-07-31)

Novelty Article 33(1) PCT:

1.1 The document D1 is regarded as being the closest prior art to the subject-matter of sole independent claim 1, and discloses (the references in parentheses applying to this document):

Apparatus for measuring the condition of fruit and vegetables comprising plunger means movable into and out of contact with a surface of an item of fruit or vegetable, said plunger means carrying a transducer which is brought into contact with an item of fruit or vegetables, the transducer reacting to a property of said fruit or vegetables to produce an output signal related to that property (cf D1 Page 2 line 6-13), characterised in that at least a part of said plunger means or transducer which contacts said item of fruit or vegetables is of generally curved shape (cf D1 Page 22 line 22-Page 23 line 2).

1.2 This citation taken in combination with figure 18 of D1 clearly discloses an impactor with an internal slug (52) mounted with a piezoelectric transducer (50) the end of the slug projects from the end of the inner housing for striking the fruit and is part spherically shaped, thus satisfying the characterising criteria of independent claim 1 of the present application, whereby the plunger or transducer is generally curved.

Hence sole independent claim 1 lacks novelty with respect to Art 33 PCT.

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1.3 Furthermore, D4 also discloses a novelty objection to this independent claim. From this document in particular on page 9 line 10 referring to figure 10, they describe a holder for fruit including a pad (50) carrying on its surface a force transducer. In the other embodiments of this document the force applicator is a separate entity from the holding mechanism carrying the force sensor. However, in this particular embodiment the force applicator and transducer are integrated into one device, (D4 Page 9 line 12-16), the resilient pad is formed with an opening (52) in alignment with the transducer, the force applicator includes an impact member (53) moveable within a barrel (54) and driven through the same opening formed in the resilient pad (52) thus integrating both impactor and transducer into one device whereby the transducer is curved (cf D4 Figures and D4 Page 2 line 35 -Page 3 line 2) and is designed to engage and conform to the outer surface of the fruit of a large range of sizes and shapes.

Hence this document also anticipates the subject-matter of claim 1 and renders it not novel.

1.4 Dependent claims 2-9 inclusive do not contain any features which in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty &/or inventive step. All additional features of these claims are disclosed in their entirety in either D1 or D2 thereby rendering the subject-matter of these claims also lacking novelty &/or inventivity.

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